

7le



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,918	07/29/2003	Brian D. Gragg	200210214-1	8126

22879 7590 09/21/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

CHERY, MARDOCHEE

ART UNIT	PAPER NUMBER
----------	--------------

2188

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,918

Applicant(s)

GRAGG, BRIAN D.

Examiner

Mardochee Chery

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to applicant's communication filed on July 6, 2006, in response to PTO Office Action mailed on April 7, 2006. The applicant's remarks and amendments to the claims and/or the specification were considered with the results that follow.
2. Claims 11 and 20 have been amended. No claims have been added, or canceled. Therefore, claims 1-27 remain pending.

Response to Arguments

3. Applicants' arguments filed on July 6, 2006, with respect to the rejection of claim 11 under 35 USC 101 have been fully considered but they are not persuasive.

It is noted that Applicants rely on the 1996 PTO Examination Guidelines For Computer-Related Inventions in an attempt to rebut the rejection of claim 11 as being nonstatutory under 35 USC 101. It appears that Applicants rely on an outdated version of the Guidelines in making his decisions and Examiner would like to point out there have several revisions and amendments to the Guidelines since 1996. The following is provided as a later version of the Guidelines in assisting the applicants with Patent Subject Matter Eligibility.

See <http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>)

4. The rejection of claims 2-3, 14, and 22 under 35 USC 112 has been withdrawn due to the amendment filed on July 6, 2006.

Art Unit: 2188

5. Applicant's arguments with respect to the rejection of claims 1-27 under 35 USC 102 and 103 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntyre (2003/0063305) in view of Quinn (2004/0006616).

As per claim 1, McIntyre discloses an image forming device comprising: a storage device for storing data [Fig. 1; ¶ 22]; and a storage access manager configured to coordinate access to the storage device from a plurality of client devices [¶ 23].

However, McIntyre does not specifically client devices that communicate with the storage device using at least one uncoordinating communication protocol as required.

Quinn discloses client devices that communicate with the storage device using at least one uncoordinating communication protocol [*clients may use different message types/formats and communication protocols to communicate requests to command servers* 208; par. 47;

Art Unit: 2188

See also claim text 3] to provide improved techniques for managing storage environments [par. 7].

Since the technology for implementing a storage system with client devices that communicate with the storage device using at least one uncoordinating communication protocol was well known as evidenced by Quinn, an artisan would have been motivated to implement this feature in the system of McIntyre to provide improved techniques for managing storage environments. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention by Applicants to modify the system of McIntyre to include client devices that communicate with the storage device using at least one uncoordinating communication protocol since this would have provided improved techniques in managing storage environment (par. 7) as taught by Quinn.

As per claims 2 and 3, McIntyre discloses the sector-level communication protocol includes a universal serial bus protocol and the file-level communication protocol includes a common internet file system protocol [par. 23].

As per claim 4, McIntyre discloses the storage access manager further includes a contention matrix configured to determine contention states for accessing the storage for accessing the storage device [¶ 33].

As per claim 4, Quinn also discloses the storage access manager further includes a contention matrix configured to determine contention states for accessing the

storage for accessing the storage device [¶ 52].

As per claim 5, McIntyre discloses a universal serial bus communication port for communicating to the storage device and, a network communication port for communicating to the storage device [¶ 23].

As per claim 6, McIntyre discloses a plurality of universal serial bus communication ports configured to provide access to the storage device [¶ 23].

As per claim 7, McIntyre discloses the storage device includes logic to notify a client device whether an access request for the storage device is permissible [¶¶ 22 and 33].

As per claim 7, Quinn also discloses the storage device includes logic to notify a client device whether an access request for the storage device is permissible [¶ 52].

As per claim 8, McIntyre discloses the storage access manager is embodied as logic [¶ 33].

As per claim 9, McIntyre discloses the storage device is one or more memory

Art Unit: 2188

cards [¶ 33].

As per claim 10, McIntyre discloses the storage access manager includes storage access manager means to coordinate the access to the storage device [¶ 34].

As per claim 11, McIntyre further discloses an article of manufacture embodied in a computer-readable medium for use in an image forming device having a storage device accessible by at least a first communication protocol and a second communication protocol, the article of manufacture comprising first processor executable instructions for causing a processor to maintain a current access state for the storage device [¶¶ 22 and 23]; and third processor executable instructions for causing a processor to determine whether the received access request is permissible based on the contention status [¶ 33].

However, McIntyre does not specifically teach second processor executable instructions for causing a processor to determine a contention status between the current access state and a received access request for accessing the storage device based on a contention logic, the contention logic defining rights for simultaneous access to the storage device from the at least first communication protocol and the second communication protocol as required.

Quinn, in addition to disclosing an article of manufacture embodied in a computer-readable medium for use in an image forming device having a storage device accessible by at least a first communication protocol and a second communication protocol [par. 9]; and third processor executable instructions for causing a processor to determine whether the received access request is permissible based on the contention status [¶ 69]; also discloses a second processor executable instructions for causing a processor to determine a contention status between the current access state and a received access request for accessing the storage device based on a contention logic, the contention logic defining rights for simultaneous access to the storage device from the at least first communication protocol and the second communication protocol [par. 52, 63] to allow exclusive access or locking to the storage device (par. 52).

Since the technology for implementing a storage device with instructions to determine a contention status between the current access state and a received access request for accessing the storage device based on a contention logic was well known as evidenced by Quinn, an artisan would have been motivated to implement this feature in the system of McIntyre in order to allow exclusive access or locking to the storage device. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention by Applicant to modify the system of McIntyre to include instructions to determine a contention status between the current access state and a received access request for accessing the storage device based on a contention logic because this would have allowed exclusive access or locking to the storage device (par. 52) as

Art Unit: 2188

taught by Quinn.

As per claim 12, McIntyre discloses the contention logic is configured to coordinate simultaneous access to the storage device by one or more clients using the first communication protocol and one or more clients using the second communication protocol [¶¶ 22-23].

As per claim 13, the rationale in the rejection of claims 4 and 7 is herein incorporated.

As per claim 14, McIntyre discloses the contention logic is configured based on the first communication protocol being a sector-level protocol and the second communication protocol being a file-level protocol [¶¶ 5, 22 and 26].

As per claim 15, McIntyre discloses at least a first communication protocol and the second communication protocol include at least one uncoordinating communication protocol [¶ 23].

As per claim 15, Quinn also discloses at least a first communication protocol and the second communication protocol include at least one uncoordinating communication protocol [par. 47; See also claim text 3].

As per claim 16, McIntyre discloses fourth processor executable instructions for causing a processor to notify a first client when access to the storage device occurs by a second client [¶¶ 22-23].

As per claim 16, Quinn also discloses fourth processor executable instructions for causing a processor to notify a first client when access to the storage device occurs by a second client [¶ 69].

As per claim 17, McIntyre discloses the at least first and the second communication protocols include the same protocol [¶¶ 23].

As per claim 18, McIntyre discloses fifth processor executable instructions for causing a processor to assign an identifier to each client requesting access to the storage device [¶ 27].

As per claim 18, Quinn also discloses fifth processor executable instructions for causing a processor to assign an identifier to each client requesting access to the storage device [¶ 69].

As per claim 19, McIntyre discloses the second processor executable instructions include storage access manager means for controlling access to the storage device [¶¶

Art Unit: 2188

22 and 33].

As per claim 20, the rationale in the rejection of claims 1, 4, and 11 is herein incorporated.

As per claim 21, the rationale in the rejection of claim 4 is herein incorporated.

As per claim 22, the rationale in the rejection of claim 3 is herein incorporated.

As per claims 23 and 25, the rationale in the rejection of claim 7 is herein incorporated.

As per claim 24, the rationale in the rejection of claim 18 is herein incorporated.

As per claim 26, the rationale in the rejection of claim 15 is herein incorporated.

As per claim 27, the rationale in the rejection of claim 17 is herein incorporated.

8. Claims 4, 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntyre (2003/0063305) in view of Quinn (2004/0006616) as applied to claims 1, 11 and 20 above, and further in view of Erlington (2003/0233544).

As per claim 4, McIntyre and Quinn disclose the claimed invention as discussed above in the previous paragraphs. However, McIntyre and Quinn do not specifically teach the storage access manager further includes a contention matrix configured to determine contention states for accessing the storage for accessing the storage device as required by the claim.

Erlington discloses the storage access manager further includes a contention matrix configured to determine contention states for accessing the storage for accessing the storage device [Figs. 4, 5 and 7; par. 26-27, 76] to allow multiple concurrent users devices to simultaneously access the computer systems (par. 3).

Since the technology for implementing a storage system with a contention matrix to determine contention states for accessing a storage device was well known as evidenced by Erlington, an artisan would have been motivated to implement this feature in the system of McIntyre and Quinn in order to allow multiple concurrent users devices to simultaneously access the computer systems. Thus, it would have been obvious to

Art Unit: 2188

one of ordinary skill in the art at the time of invention by Applicant to modify the system of McIntyre and Quinn to include a contention matrix to determine contention states for accessing a storage device because this would have allowed multiple concurrent users devices to simultaneously access the computer systems (par. 3) as taught by Erlington.

As per claim 13, the rationale in the rejection of claims 4 and 7 is herein incorporated.

As per claim 21, the rationale in the rejection of claim 4 is herein incorporated.

Conclusion

9. When responding to the office action, Applicant is advised to clearly point out the patentable novelty that he or she thinks the claims present in view of the state of the art disclosed by references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111(c).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mardochee Chery whose telephone number is (571) 272-4246. The examiner can normally be reached on 8:30A-5:00P.

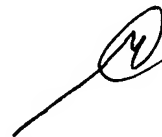
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manonama Padmanabhan can be reached on (571) 272-4210. The fax

Art Unit: 2188

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 15, 2006



Mardochee Chery
Patent Examiner
AU2188



REGINALD BRAGDON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100